Remarks

Applicant respectfully traverses the § 103(a) rejections because the Examiner improperly bases the rejections on various assertions regarding the alleged teachings of the '663 reference that are either unsupported by the '663 reference or directly contradicted by the '663 reference. In particular, regarding the rejection of claims 6 and 7, the Examiner's assertions that the '663 reference's vias 28 do not block the penetration of electric field lines from inductor 16 to substrate 12 (and do not substantially inhibit inductive coupling between inductor 16 to substrate 12) are directly contradicted by the '663 reference which states that the orientation of the vias 28 "effectively places conducting vias 28 in a position to intercept and terminate the electric field emanating from spiral inductor 16." Col. 5:14-16. The Examiner's further reliance upon ground plane 22 (prior art Figure 4 of the '663 reference) is wholly improper because the '663 reference expressly teaches that the disclosed arrangement of ground strips 26 and vias 28 replaces ground plane 22, with the disclosed arrangement performing the function of the ground plane (*e.g.,* to block the electric field emanating from the inductor and to inhibit inductive coupling between the inductor and the substrate). *See, e.g.,* Figure 1 and Col. 6:56-67. Accordingly, the § 103(a) rejections of claims 6 and 7 must be withdrawn. The discussion below particularly addresses the impropriety of the remaining § 103(a) rejections.

In the instant Office Action dated July 22, 2009, the following rejections are presented: claims 1-3, 5-7, 9 and 11-22 stand rejected under 35 U.S.C. § 103(a) over Ballantine (U.S. Patent No. 6,489,663) in view of Minami (U.S. Patent No. 6,730,983); and claims 4, 8 and 10 stand rejected under 35 U.S.C. § 103(a) over the '663 reference in view of the '983 reference and further in view of Kuroda (U.S. Patent No. 6,693,315). Applicant traverses all of the rejections and, unless explicitly stated by the Applicant, does not acquiesce to any objection, rejection or averment made in the Office Action.

Applicant respectfully traverses the § 103(a) rejection because the cited combination of references lacks correspondence to the claimed invention. For example, none of the asserted references teaches the claimed invention "as a whole" (§ 103(a)) including aspects regarding, *e.g.,* a plurality of tilling structures that are arranged in a geometrical pattern so as to substantially inhibit the inducement of an image current in

the tilling structures by a current in an inductive element. Because none of the references teach these aspects, no reasonable combination of these references can provide correspondence to the claimed invention. As such, the § 103 rejection fails.

More specifically, the '663 reference does not teach that vias 28 (*i.e.,* the asserted tilling structures) are arranged to substantially inhibit the inducement of an image current in the vias 28 by a current in inductor 16 (*i.e.,* the asserted inductive element). Instead, the '663 reference arranges the vias 28 to terminate the electric field lines emanating from inductor 16 and to decrease the parasitic capacitance present between inductor 16 and ground strips 26. *See, e.g.,* Figure 1 and Col. 5:40-45. Applicant notes that the only discussion in the '663 reference relating to preventing the flow of an image current is directed to preventing the flow of an image current in the ground strips 26 (*see, e.g.,* Col. 3:38-41, Col. 4:39-42 and Col. 6:59-62). Thus, the '663 reference does not teach arranging the vias 28 to prevent the flow of an image current in the vias 28.

In a failed attempt to address the '633 reference's lack of correspondence, the Examiner erroneously asserts that the '663 reference's configuration of ground strips 26 and vias 28 "will inhibit the inducement of an image current from an inductive element. The current is directed to the grounding strip [Col. 6, Lines 59-64]." *See* page 8 of the Final Office Action. The relied upon portion of the '663 reference (*i.e.,* Col. 6:59-64) does not mention current being directed to the ground strips, but instead teaches preventing the flow of an image current in the ground strips. Applicant notes that the Examiner appears to be asserting that current is being directed from the vias 28 to the ground strips 26. As such, the Examiner illogically attempts to rely upon current being induced in the vias 28 to somehow assert that the vias 28 are arranged to inhibit inducement of an image current in the vias 28. The Examiner has not presented any evidence of record (from the '663 reference or otherwise) to support the assertion that the vias 28 are arranged in the manner of the claimed invention. Thus, the Examiner's assertions regarding the alleged teachings of the '663 reference are mere speculation that is unsupported by the evidence of record and upon which it is improper to base a rejection. As discussed above, the '663 reference does not teach arranging the vias 28 to prevent the flow of an image current in the vias 28. Applicant notes that the '983 and '315 references are not alleged by the Examiner and in fact do not address the above

discussed deficiencies of the primary '663 reference. For example, the '983 reference does not teach or suggest that dummy elements 12 are arranged to prevent the inducement of an image current in the dummy elements 12. As such, the Examiner's proposed combination does not correspond to the claimed invention.

Moreover, the '663 reference teaches away from the Examiner's proposed combination. Consistent with the recent Supreme Court decision, M.P.E.P. § 2143.01 explains the long-standing principle that a §103 rejection cannot be maintained when the asserted modification undermines either the operation or the purpose of the main ('663) reference - the rationale being that the prior art teaches away from such a modification. *See KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1742 (2007) ("[W]hen the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be non-obvious."). In the previous response, Applicant explained in detail the impropriety of the Examiner's proposed combination to which the Examiner failed to respond as required. *See, e.g.,* M.P.E.P. § 707.07(f). As such, the Examiner has improperly maintained the rejection without responding to the substance of Applicant's previous arguments.

Turning now to the impropriety of the Examiner's proposed combination, the modification of the '663 reference would apparently result in the vias 28 being electrically connected to substrate 12 (*see* Figure 1 of the '663 reference) since the dummy elements 12 of the '983 reference are taught to be electrically connected to substrate 1 (*see* Figure 2 of the '983 reference). The modified vias 28 would result in high frequency-energy passing through the vias 28 into substrate 12 (as taught by the '983 reference at Col. 2:26-28), thereby increasing coupling between the substrate 12 and the inductor 16 relative to the unmodified vias 28 of the '663 reference, which are taught to be isolated from the substrate 12 (*see, e.g.,* Figure 1 and Col. 4:52-64). Thus, the Examiner's proposed modification of the '663 reference would render the '663 reference unsatisfactory for its intended purpose of preventing coupling between the substrate 12 and the inductor 16 (*e.g.,* by preventing the electric field lines generated by the inductor from penetrating into the substrate). *See, e.g.,* Col. 3:62-67. Accordingly, the '663 reference teaches away from the Office Action's proposed modification and there would be no motivation for the skilled artisan to modify the '663 reference in such a manner.

In view of the above, the § 103(a) rejections are improper and Applicant requests that they be withdrawn.

Applicant further traverses the § 103(a) rejection of claims 17-19 because the Examiner's proposed combination does not correspond to aspects of the claimed invention directed to the device including a capacitive element. In particular, the cited portions of the '663 reference do not teach that the vias 28 (*i.e.,* the asserted tilling structures) form one electrode of the capacitive element and that the ground strips 26 (*i.e.,* the asserted ground shield) form the other electrode of the capacitive element as in claims 17 and 19. Instead, the '663 reference teaches that the vias 28 decrease the parasitic capacitance present between inductor 16 and ground strips 26. *See, e.g.,* Figure 1 and Col. 5:40-45. Moreover, the '663 reference expressly states that "In the preferred embodiment shown, the conducting vias are shown terminating between and slightly below the wires of the inductor because that is the configuration that most effectively keeps the capacitance down." Col. 4:65 to Col. 5:1. Thus, the '663 reference uses vias 28 to prevent the IC 200 from functioning as a capacitor between inductor 16 and ground strips 26. Applicant notes that the Examiner's failed attempt to maintain the rejection apparently relies upon asserting that ground strips 26 form one electrode of the capacitor and that inductor 16 forms the other electrode of the capacitor. *See* page 9 of the Final Office Action ("Each of the vias 28 or grounding strip 26 forms an electrode of a capacitive element with the conductive element of inductor 16."). As such, the Examiner has acknowledged that there is no correspondence to the claimed invention which requires that the tilling structures form one electrode and the ground shield forms the other electrode. The claimed inductive element does not form one of the electrodes of the capacitive element as asserted by the Examiner's alleged correspondence. Accordingly, the § 103(a) rejection of claims 17-19 is improper and Applicant requests that it be withdrawn.

In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Peter Zawilski, of NXP Corporation at (408) 474-9063 (or the undersigned).

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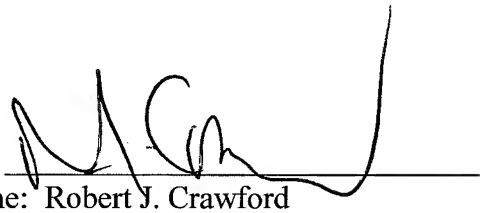
By: 
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